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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,582	04/12/2004	Gary A. Ross	11288.00	2646

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EXAMINER	
ELLIS, SUEZU Y	
ART UNIT	**PAPER NUMBER**
2878	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/822,582	ROSS ET AL.	
	Examiner	Art Unit	
	Suezu Ellis	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *51-64* is/are pending in the application.

4a) Of the above claim(s) *60-63* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *51-58 and 64* is/are rejected.

7)☒ Claim(s) *59* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RESPONSE TO AMENDMENT

Election/Restrictions

Newly submitted claims 60-63 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 60-63 are directed towards a method of creating an optically detectable security.

Claims 51-59 and 64 are directed towards an optically detectable security feature and a method of validating an item using the optically detectable security feature and using the optically detectable security feature in a security media.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 60-63 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

Applicant's arguments with respect to claims 51-59 and 64 have been considered but are moot in view of the new grounds of rejection.

Claim Objections

Claim 59 is objected to because of the following informalities:

With respect to claim 59, line 10 should be indented to be consistent with the rest of the claim where each step of the method is defined using separate paragraphs. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 51-58 and 64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 51, 55, 58 and 64, claim language recites "different emission lifetimes at the plurality of predetermined wavelengths". It is unclear what the emission lifetimes are different from. It is unclear if applicant intends the phrase to mean that the emission lifetimes of the particle that incorporates rare earth dopant at the plurality of predetermined wavelengths is different than the emission lifetime at the same plurality of predetermined wavelengths of the rare earth dopant alone, or if the emission lifetime at one predetermined wavelength is different than the emission lifetime at another predetermined wavelength of the rare earth doped particle. Please clarify.

With respect to claim 58, lines 4 and 11 recite the term "a glass or plastic carrier". However, lines 5 and 9 recite "a glass or plastic particle", line 6 recites "the particle", line 12 recites "creating particles" and line 13 recites "each particle". It is unclear which terminology applicant intends. Is it particle or carrier? The terms should be consistent

throughout the claim. Further, in lines 10-11, claim language recites "incorporating the plurality of rare earth dopants into the glass or plastic carrier" and lines 12-13 recite "creating particles of glass or plastic incorporating the plurality of rare earth dopants". Both phrases appear to be redundant. Is lines 12-13 meant to convey a different idea than lines 10-11? Please clarify.

Allowable Subject Matter

Claim 59 is allowed.

Claims 51-58 and 64 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 51, 55, 58 and 64, prior art fails to teach singly or in combination an optically detectable security feature comprising a glass or plastic particle that incorporates at least one rare earth dopant with a security profile that comprises a ratio of emission intensities at a plurality of predetermined wavelengths and emission lifetimes at the plurality of predetermined wavelengths.

With respect to claim 59, prior art fails to teach singly or in combination an a method of validating an item having an optically detectable security feature that comrprises at least one rare earth doped glass or plastic particle wherein the method comprises the steps of deteing emissions from the security feature at a plurality of

predetermined wavelengths, ascertaining a ratio of intensities of emissions at the plurality of predetermined wavelengths and emission lifetimes at each of the plurality of predetermined wavelengths and comparing the ascertained ratio of intensities of emissions and the emission lifetimes with a security profile that comprises relative emission intensities at the plurality of predetermined wavelengths and emission lifetimes at each of the plurality of predetermined wavelengths.

Claims not specifically addressed would be allowable due to their dependency.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Spowart (US 6,966,998) discloses an optically detectable security feature comprising a rare earth dopant that is incorporated glass or plastic particle and the security feature is incorporated in a media. However, Spowart discloses the rare earth doped glass particle does not fluoresce upon illumination by visible, IR or UV light. Thus Spowart fails to have a security profile associated with the new energy level profile that comprises a ratio of emission intensities at a plurality of predetermined wavelengths and different emission lifetimes at the plurality of predetermined wavelengths.

Jones, II et al. (US 2005,0178841) discloses a system that uses a security feature to authenticate documents. Jones discloses measuring the ratio of emission peak heights (emission intensities) at predetermined wavelengths and also discloses comparing the emission lifetime to a set of admissible lifetimes to determine if the

signatures match those of an authentic mark at predetermined wavelengths. However, Jones fails to disclose a security feature comprising at least one rare earth dopant that is incorporated in a glass or plastic particle.

Dejneka et al. ("Rare earth-doped glass microbarcodes", Science and Technology Division, Corning Incorporated) discloses microbarcodes comprising rare earth ions doped in a silicate glass matrix and the microbarcodes fluoresce under UV illumination. However the rare earth-doped glass microbarcodes of Dejneka are used in biotechnology environment and not in a security environment.

Telephone/Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suezu Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephone B. Allen
Primary Examiner